

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
31 December 2003 (31.12.2003)

PCT

(10) International Publication Number
WO 2004/001200 A1

(51) International Patent Classification⁷: F01M 13/04,
B04B 5/08, 9/10, B01D 45/14

(21) International Application Number:
PCT/SE2003/001031

(22) International Filing Date: 17 June 2003 (17.06.2003)

(25) Filing Language: Swedish

(26) Publication Language: English

(30) Priority Data: 201933.9 20 June 2002 (20.06.2002) SE

(71) Applicant (for all designated States except US): ALFA
LAVAL CORPORATE AB [SE/SE]; Rudeboksvägen 3,
S-221 00 Lund (SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): EKEROTH, Mats

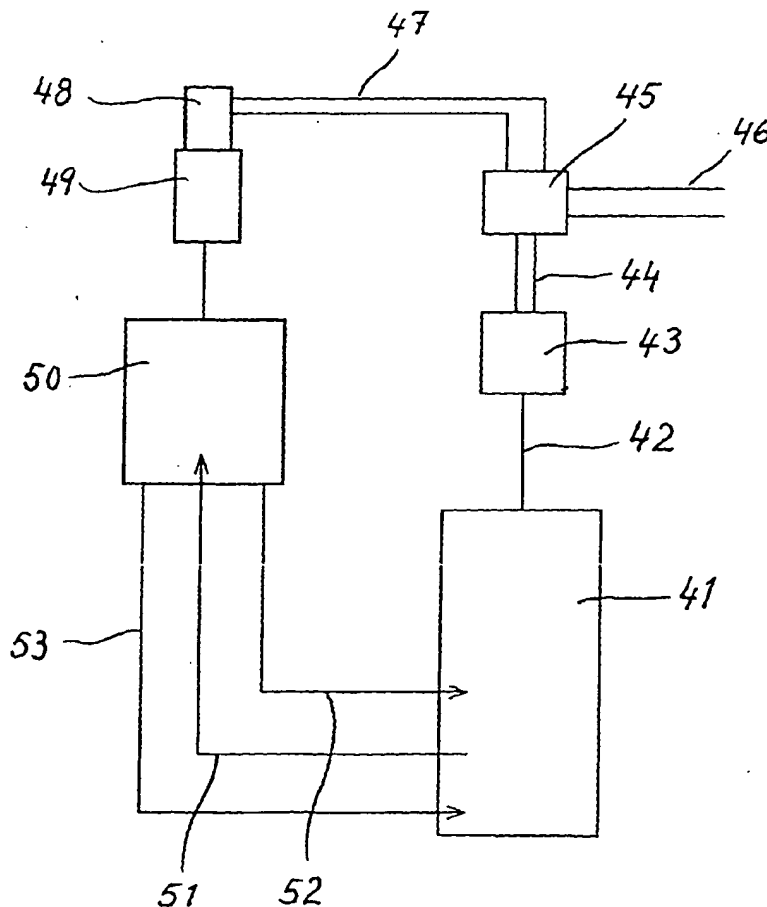
[SE/SE]; Törnrosgården 9, S-261 71 Landskrona (SE).
CARLSSON, Claes-Göran [SE/SE]; Skogshemsvägen
63B, S-146 36 Tullinge (SE). RIDDERSTRÅLE, Rolf
[SE/SE]; Heleneborgsgatan 31C, S-117 31 Stockholm
(SE). SKOOG, Jan [SE/SE]; Musikalvägen 73, S-142 43
Skogås (SE). STRÖM, Göran [SE/SE]; Rönningevägen
63A, S-144 64 Rönninge (SE). WASE, Claes [SE/SE];
Grandalsvägen 10, S-146 38 Tullinge (SE).

(74) Agent: CLIVEMO, Ingemar; Alfa Laval Corporate AB,
Hans Stahles väg, S-147 80 Tumba (SE).

(81) Designated States (national): AE, AG, AL, AM, AT (util-
ity model), AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA,
CH, CN, CO, CR, CU, CZ (utility model), CZ, DE (util-
ity model), DE, DK (utility model), DK, DM, DZ, EC, EE
(utility model), EE, ES, FI (utility model), FI, GB, GD, GE,
GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ,
LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN,
MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO,

[Continued on next page]

(54) Title: A METHOD AND A DEVICE FOR CLEANING OF CRANKCASE GAS



(57) Abstract: Upon cleaning of crankcase gas generated during operation of an internal combustion engine (31; 41) in its crankcase, a centrifugal separator (34; 50) is used, which includes a rotor arranged for rotation by means of a driving motor (9; 49) and arranged by its rotation to suck crankcase gas from the crankcase through a conduit (51) to the centrifugal separator. During operation of the combustion engine (31; 41) a parameter, e.g. a measurement of the load on the combustion engine (31; 41), is sensed, the magnitude of said parameter being related to the amount of crankcase gas generated per unit of time in the crankcase. Depending upon a sensed change of the sensed parameter the rotational speed of the rotor of the centrifugal separator (34; 50) is changed in a way such that the gas pressure in the crankcase is maintained at a predetermined value, or within a predetermined pressure interval, during the operation of the combustion engine (31; 41).